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Kanegsberg

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(54) **NUCLEAR MAGNETIC RESONANCE GYROSCOPE**

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G01V 3/00 (2006.01)

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(58) **Field of Classification Search** 324/300–322; 600/410–445
See application file for complete search history.

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(57) **ABSTRACT**

A method comprises the steps of providing a nuclear magnetic resonance cell with first, second, and third nuclear moment gases and at least one optically pumpable substance; obtaining first, second, and third measured precession frequencies that correspond to the first, second, and third nuclear moment gases, wherein the first, second, and third measured precession frequencies are altered from corresponding first, second, and third Larmor precession frequencies by a rotational rate and corresponding first, second, and third local magnetic fields; and determining the rotational rate with compensation for the first, second, and third local magnetic fields through employment of the first, second, and third measured precession frequencies.

19 Claims, 1 Drawing Sheet